Maxstar® 200 Series

Issued March 2001 • Index No. DC/32

TIG/Stick Welding Power Source

Quick Specs

Heavy Industrial Applications
Petro/Chem Fabrication
Aerospace
Food/Beverage Industry
Mechanical Contractors
Shipboard Installation/Repair
Dairy Industry

Processes
TIG (GTAW)
Pulsed TIG (GTAW-P)
with DX and LX Models
Stick (SMAW)

Input Power Requires 3- or 1-Phase Power

Amperage Range 1–200 A

Max. Open-Circuit Voltage 80

Weight 37 lb (16.8 kg)

The Power of Blue®

Auto-Line™ provides state-of-the-art flexibility to the end user. The Auto-Line circuitry automatically connects to 120–460 VAC, single- or three-phase power without removing the covers to relink the power source. No longer is there a concern if you have the correct machine for shop or the job site.

Portable in the shop or at the job site—at 37 lb the Maxstar 200 is easily moved from location to location.

Inverter-based, DC power source has **state-of-the-art operator interface** allowing the user extra set-up capabilities in a compact machine. Features more precise control of output parameters than traditional knobs and switches.

Superior TIG/Stick arc performance on all input voltages. Even on the difficult to run electrodes like E6010.

Programmable HF start parameters allows the independently set HF starting conditions based upon process and memory selection.

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Lift-Arc™ **start** provides TIG arc starting without the use of high frequency.

Maxstar 200 DX | Maxstar 200 SD | Maxstar 200 LX

Available in Three Models:

SD— Provides the basic features that are required for most TIG or Stick welding applications.

DX— When the job demands greater control the DX provides pulse on/off, pulse frequency, peak % time, background amperage, initial amperage, initial slope time, final slope time and final amperage control.

LX— Automation made simple. With the **Automation Interface Connector**, the integrator can quickly interface to the output disable, weld start/stop, gas start/stop inputs; valid arc, pulse lock out, and end of weld sequence outputs.

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

Miller® The Power of Blue.

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM

Specifications (Subject to change without notice.)

Welding Mode	Input Power	Rated Output	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 50/60 Hz, 120 V	200 V	230 V	400 V	440 V	460 V	KVA	KW	Dimensions	Net Weight
TIG (GTAW)	3-Phase	175 A at 17 V, 60% Duty Cycle	120 VAC, 1–110 A	80 VDC	— —	12.1 0.16*	10.5 0.16*	6.0 0.24*	5.3 0.24*	5.2 0.25*	4.2 0.06*	4.0 0.03*	H: 13-1/2 in (343 mm) W: 7-1/2 in (191 mm) D: 17-1/2 in (445 mm)	37 lb (16.8 kg)
	1-Phase	175 A at 17 V, 60% Duty Cycle	200–460 VAC, 1–200 A		— —	19.9 0.25*	17.4 0.23*	— —	— —	— —	4.0 0.05*	4.0 0.02*		
		150 A at 16 V, 70% Duty Cycle			29.7 0.42*	17.1 0.25*	14.1 0.23*	— —	— —	— —	3.4 0.05*	3.4 0.03*		
		110 A at 15 V, 100% Duty Cycle			20.0 0.42*	— —	— —	— —	— —	— —	2.0 0.05*	2.0 0.03*		
Stick (SMAW)	3-Phase	150 A at 26 V, 60% Duty Cycle	120 VAC, 1–90 A	80 VDC	— —	14.7 0.16*	13.1 0.16*	7.4 0.24*	6.6 0.24*	6.4 0.25*	5.2 0.06*	5.0 0.03*		
	1-Phase	150 A at 26 V, 60% Duty Cycle	200–460 VAC, 1–200 A		— —	24.9 0.25*	21.7 0.23*	— —	— —	— —	5.0 0.05*	5.0 0.02*		
		125 A at 25 V, 50% Duty Cycle			34.1 0.42*	19.6 0.25*	17.2 0.23*	— —	— —	— —	4.0 0.05*	3.8 0.03*		
		90 A at 24 V, 100% Duty Cycle			25.0 0.42*	— —	— —	— —	— —	— —	4.0 0.05*	3.8 0.03*		

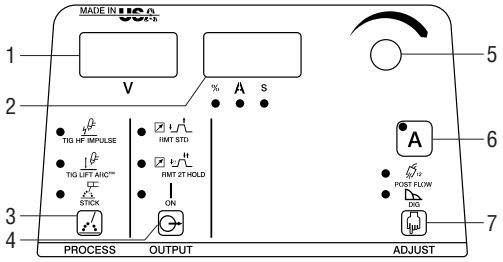
** Indicates idle draw.*

CSA approval. *Models with CE specifications are available and manufactured according to the Standards IEC-974-1 and EN-60974-1.*

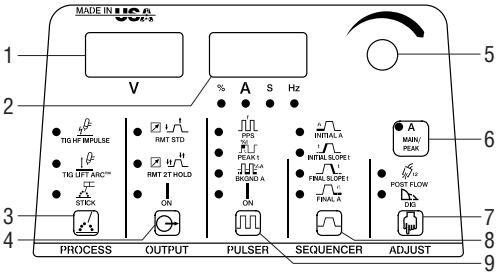
Control Panel

1. Voltmeter
2. Ammeter
3. Process Control
4. Output Control
5. Encoder Control
6. Amperage Control
7. Adjust Control
8. Sequencer Controls
9. Pulser Controls

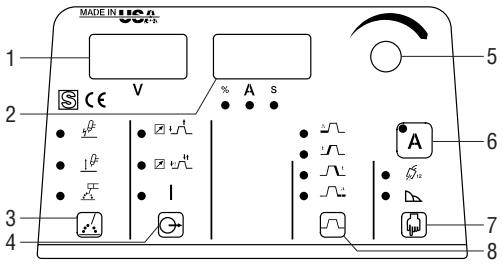
Maxstar 200 SD



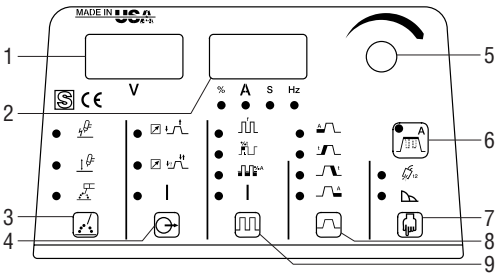
Maxstar 200 DX/LX



Maxstar 200 SD (CE)



Maxstar 200 DX/LX (CE)

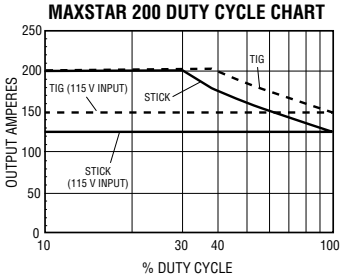


Control Panel Parameter Values

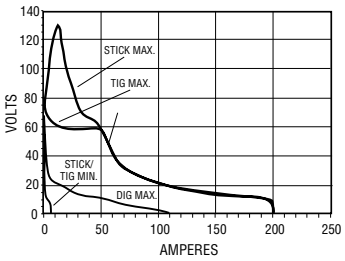
A. Preflow (s)	0.0–25	**F.** Pulse Frequency (Hz)	0.1–500	**K.** Final Time (s)	0.0–25 (LX only)
B. Initial Time (s)	0.0–25 (LX only)	**G.** Background Amperage (%)	0–100	**L.** Postflow Time (s)	0–0.50
C. Initial Amperage (A)	1–200	**H.** Peak Percent Time (%)	5–95	**M.** Dig (%)	0–100
D. Initial Slope Time (s)	0.0–25	**I.** Final Slope Time (s)	0.0–25		
E. Weld Amperage (A)	1–200	**J.** Final Amperage (A)	1–200		

Performance Data

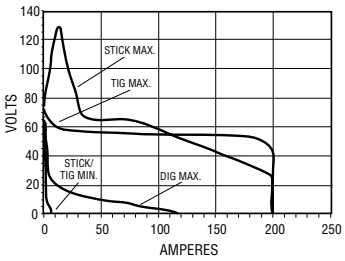
MAXSTAR 200 DUTY CYCLE CHART



115 VAC INPUT



OTHER INPUT VOLTAGES



Included Accessories

Non-CE SD/DX Models Include:
- (2) International-style connectors 35/50

Non-CE LX Model Includes:
- (2) International-style connectors 35/50
- (1) 14-pin amphenol with clamp
- (1) 10-pin amphenol with clamp

CE SD/DX Models Include:
- (2) International-style connectors 35/50
- (1) 14-pin amphenol with clamp
- (1) 5/8 in - 18 gas fitting

CE LX Model Includes:
- (2) International-style connectors 35/50
- (1) 14-pin amphenol with clamp
- (1) 10-pin amphenol with clamp
- (1) 5/8 in - 18 gas fitting

Genuine Miller Accessories

Remote Controls

RFCS-14 HD Foot Control #194 744
For all Miller solid-state power sources after serial number JK674521. This new design increases stability with a larger base and durability with a heavier cord. Maximum flexibility is accomplished with a reconfigurable cord that can exit the front, back or either side of the pedal. Foot pedal provides remote current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

RFCS-14 Foot Control #043 554
For all Miller solid-state power sources after serial number JK674521. Foot pedal provides remote current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

RCCS-14 Remote Contactor and Current Control #043 688
For all Miller solid-state power sources after serial number JK674521. North/south rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Great for applications that require a finer amperage control. Includes 26.5 ft (8 m) control cord and 14-pin plug.

RCC-14 Remote Contactor and Current Control #151 086
For all Miller solid-state power sources after serial number JK674521. Side-to-side rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Great for production or contractors that need quick ramp-up. Includes 26.5 ft (8 m) control cord and 14-pin plug.

RMLS-14 Switch #129 337
For all Miller solid-state power sources after serial number JK674521. Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and backward for momentary contact. Includes 26.5 ft (8 m) cord and 14-pin plug.

RMS-14 On/Off Control #187 208
For all Miller solid-state power sources after serial number JK674521. Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5 ft (8 m) cord and 14-pin plug.

Extension Cords
#122 973 25 ft (7.6 m)
#122 974 50 ft (15 m)
#122 975 75 ft (23 m)
For 14-pin remote controls. 25, 50 or 75 ft (7.6, 15.2 or 22.8 m) cords. 14-pin plug to a 14-pin socket.

TIG (GTAW) Torches

Diamondback™ TIG Torches
The NEW Diamondback line of ergonomically designed TIG torches from Miller Electric complements the most popular TIG power source line available today. The Diamondback torch line includes both air-cooled and water-cooled models. The air-cooled models range in size from 125 to 200 A. The water-cooled models include 250 and 350 A torches. All models are standard with a rigid head. See Diamondback TIG Torch Selector Guide.

TIG (GTAW) Torch Adapters

DA-917F #194 720
Used to adapt a 1-piece 125 or 150 amp air-cooled torch to an International-style connector.

DA-1820L #190 219
Used to adapt a 250 or 350 amp water-cooled torch to an International-style connector.

DA-26R #194 724
Used to adapt a 1-piece 200 amp air-cooled torch to an International-style connector.

International-Style Connectors (Will accept Dinse™ or other international connectors.)

Note: All Maxstar power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50-mm male International-style plugs for use with #1 or #2 AWG size cable.)

International-Style Connector Kit #042 418 50 mm
Accepts #1 or #2 AWG cable size. Required if male plugs shipped with power source must be replaced or if additional plugs are needed. Kit includes one International-style male plug which attaches to the work and/or weld cables and plugs into the International-style receptacles on the power source.

Extension Kit for International-Style Cable Connectors #042 419 50 mm
Accepts #1 or #2 AWG size cable. Used to adapt or extend weld and/or work cables. Kit includes one male International-style plug and one in-line female International-style receptacle.

International/Tweco® Adapter #042 465
A one-piece adapter which has an International-style male plug (to power source) on one end and a female Tweco receptacle (for weld cable connection) on other end.

International/Cam-Lok Adapter #042 466
A one-piece adapter which has an International-style male plug (to power source) on one end and a Cam-Lok receptacle (for weld cable connection) on other end.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Maxstar® 200 SD	**#903 701** **#903 768**	Basic controls for TIG/Stick, 120–460 VAC Basic controls for TIG/Stick, 120–460 VAC with **CE**		
Maxstar® 200 DX	**#903 701-01-1** **#903 768-01-1**	Full-feature controls for TIG/Stick, 120–460 VAC Full-feature controls for TIG/Stick, 120–460 VAC with **CE**		
Maxstar® 200 LX	**#903 701-01-2** **#903 768-02-1**	Full-feature controls with the required automation connections, 120–460 VAC Full-feature controls with the required automation connections, 120–460 VAC with **CE**		
TIG Accessories				
TIG Torch Adapters	**#194 720** **#190 219** **#194 724**	DA-917F DA-1820L DA-26R		
Diamondback™ TIG Torches		See Diamondback TIG Torch Selector Guide		
Consumables/Tungsten		See Parts Guide		
Gas Cylinder/Hose and Fittings				
Remote Controls				
RFCS-14 HD	**#194 744**	Heavy-duty foot control		
RFCS-14	**#043 554**	Foot control		
RCCS-14	**#043 688**	North/south fingertip control		
RCC-14	**#151 086**	Side-to-side fingertip control		
RMLS-14	**#129 337**	Momentary/maintained rocker control		
RMS-14	**#187 208**	Momentary rubber dome switch		
Extension Cords		See page 3		
Coolant Systems				
Coolmate™ 3	**#043 007** **#043 007-01-2** **#043 008** **#043 008-01-2**	115 VAC 115 VAC with **CE** 230 VAC 230 VAC with **CE**		
Coolmate™ V3	**#043 009** **#043 009-01-2**	115 VAC 115 VAC, 50/60 Hz with **CE**		
Coolmate™ 4	**#042 288** **#042 288-01-5**	115 VAC 115 VAC with **CE**		
Aluminum-Protecting Coolant	**#043 809**			
Low-Conductivity Coolant	**#043 810**			
International-Style Connectors				
International-Style Connector Kit	**#042 418**	50 mm		
Extension Kit for International-Style	**#042 419**	50 mm		
International/Tweco® Adapter	**#042 465**	A one-piece adapter with International-style male plug		
International/Cam-Lok Adapter	**#042 466**	A one-piece adapter with International-style male plug		

Date: **Total Quoted Price:**

Distributed by:

Miller
The Power of Blue.

Litho in USA